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| **sodium chloride** | **Chemistry**  **Salts** | **شعار-القسم** |
| **Worksheet**  **(5)** |

|  |  |
| --- | --- |
| Name: | Class: 8 / ……… |
| Date: |

**1- Introduction**

Lock at the pictures below:



Sodium carbonate

Sodium chloride

Zinc sulphate

Copper sulphate

Ammonium sulphate

Complete the following

The pictures above show some common ***salts. Salt*** is any **metal compounds** that can be made from acids.

**2- How to prepare a salt?**

**a- Reacting an acid with a metal**

**Example:**

- Zinc + sulphuric acid **zinc sulphate** + **hydrogen**

- Iron + hydrochloric acid **Iron chloride** + **hydrogen**

**Generalization :** metal + acid **salt** + **hydrogen**

Complete the following:

magnesium + sulfuric acid  arrow **magnesium sulfate**     +   **hydrogen**.

magnesium + hydrochloric acid  arrow **magnesium chloride**     +   **hydrogen**.

aluminium + hydrochloric acid  arrow **aluminium chloride**  +   **hydrogen**.

zinc + sulfuric acid  arrow   **zinc sulfate**   +   **hydrogen**.

iron + hydrochloric acid  arrow **iron(II) chloride**     +   **hydrogen**.

lead + sulfuric acid  arrow   **lead sulfate**   +   **hydrogen**.

**b- Reacting an acid with a metal oxide and metal hydroxide**

**Example:**

- copper(II)oxide + sulphuric acid copper(II) sulphate + water

- magnesium oxide + hydrochloric acid magnesium chloride + water

**Generalization** : metal oxide + acid **salt** + **water**

**c- Reacting an acid with a carbonate**

**Example:**

- magnesium carbonate + hydrochloric acid magnesium chloride + carbon dioxide + water

- hydrochloric acid + zinc carbonate zinc chloride + carbon dioxide + water

**Generalization** : metal carbonate + acid **salt** + **water + carbon dioxide**

**d- Neutralization of an alkali by an acid**

**Example:**

- nitric acid + sodium hydroxide sodium nitrate + water

**Generalization** : alkali + acid **salt** + **water**